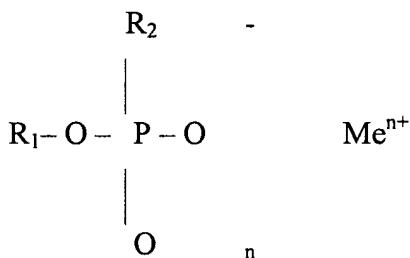


AMENDMENT TO THE CLAIMS:

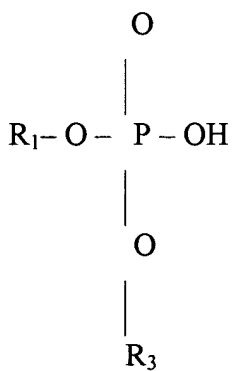
The claims are amended as follows:

1. (Currently amended): A-An aqueous solution composition for preventing and controlling fungicidal and bacterial diseases in plants, said aqueous solution composition comprising effective amounts of

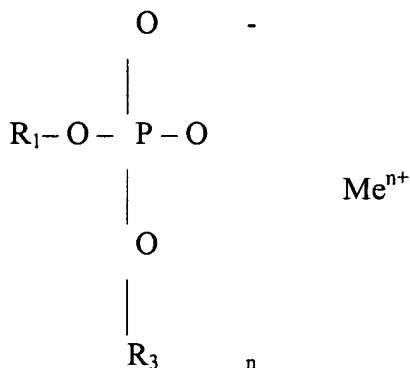
- (a) at least one first-salt composition selected from the group consisting of  $(\text{NH}_3)_2 \text{HPO}_3$  and compounds having the following formula:



- (b) at least one second-salt composition selected from the group consisting of  $(\text{NH}_3)_2 \text{HPO}_4$ ,  $(\text{NH}_3)_3 \text{PO}_4$ , and compounds having the following formula:



or the formula:



where R<sub>1</sub> is selected from the group consisting of H, K, an alkyl radical containing from 1 to 4 carbon atoms, halogen-substituted alkyl or nitro-substituted alkyl radical, an alkenyl, halogen-substituted alkenyl, alkynyl, halogen-substituted alkynyl, alkoxy-substituted alkyl radical, ammonium substituted by alkyl or hydroxy alkyl radicals;

R<sub>2</sub> and R<sub>3</sub> are selected from the group consisting of H and K;

Me is selected from the group consisting of K, alkaline earth metal cations, an aluminum atom, and an ammonium cation;

n is a whole number equal to between 1 and 3, equal to the valence of Me; and

(c) at least one metal chelate wherein the said metal of said metal chelate is a metal selected from the group consisting of iron, zinc, tin, manganese, copper and combinations thereof, and the chelate of said metal chelate is selected from the group consisting of pEDDHA, EDDHA, EDDHMA and combinations thereof rows 4 or 5 of the periodic table of the elements.

2. (Currently amended): The aqueous solution ~~composition~~ of Claim 1 wherein the concentration of said metal chelate ~~is present~~ in said aqueous solution is such that, when said aqueous solution is applied to one acre, about 0.01 to about 2 pounds AI of said metal chelate is applied to that acre. ~~in amount equal to from about 0.01 to about 2 pounds AI per acre.~~

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3. (Currently amended): The aqueous solution ~~composition~~ of Claim 2 wherein the concentration of said metal chelate is ~~present~~ in said aqueous solution is such that, when said aqueous solution is applied to one acre, about 0.01 to about 0.8 pounds AI of said metal chelate is applied to that acre. ~~in amount equal to from about 0.01 to about 0.8 pounds AI per acre.~~

AI cont'd  
4. (Currently amended): The aqueous solution ~~composition~~ of Claim 1 wherein said metal of said metal chelate is a metal selected from the group consisting of zinc, manganese and copper and combinations thereof ~~row 4 of the periodic table of the elements.~~

5. (Currently amended): The aqueous solution ~~composition~~ of Claim 1 wherein said metal chelate has a solubility equal to about 100% where at least 80 pounds of said metal chelate are dissolved in 100 gallons of water at 50° C.

6. (Currently amended): The aqueous solution ~~composition~~ of Claim 1 wherein said metal chelate is added as an aqueous solution containing an amount of metal chelate (on a metal basis) equal to between 1% and 5% by weight of the aqueous solution.

7. (Cancelled)

8. (Cancelled)

9. (Currently amended): The aqueous solution ~~composition~~ of Claim 4 ~~8~~ wherein said metal chelate is selected from the group consisting of Cu-EDDHA, Cu-pEDDHA, Cu-EDDHMA, and combinations thereof.

10. (Cancelled)

11. (Currently amended): The aqueous solution composition of Claim 1 wherein said at least one first salt composition is selected from the group consisting of  $K_2HPO_3$ ,  $KH_2PO_3$ ,  $(NH_3)H_2PO_3$ , and  $(NH_3)_2HPO_3$ ; and said at least one second salt

composition is selected from the group consisting of  $K_2HPO_4$ ,  $KH_2PO_4$ ,  $K_3PO_4$ ,  $(NH_3)_2HPO_4$ ,  $(NH_3)H_2PO_4$ , and  $(NH_3)_3PO_4$ .

12. (Currently amended): The aqueous solution composition of Claim 1 wherein said composition is in an aqueous solution, wherein each said at least one said first composition and at least one said second composition salt is present in solution from about 0.1 millimolar to about 1000 millimolar.

13. (Currently amended): The aqueous solution composition of Claim 12 wherein said composition is in an aqueous solution, wherein each said at least one said first composition and at least one said second composition salt is present in solution from about 20 millimolar to about 200 millimolar.

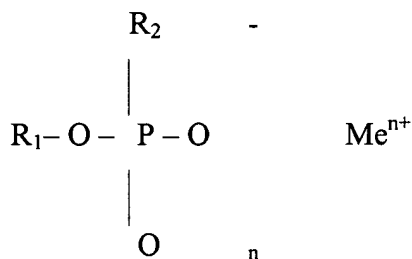
14. (Currently amended): The aqueous solution composition of Claim 1 wherein the weight ratio of said at least one first composition salt to said at least one second composition salt is 1:0.001 to 1:1,000.

15. (Currently amended): The aqueous solution composition of Claim 1 wherein said composition treats or prevents diseases caused by Phytophthora.

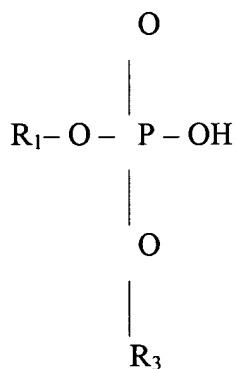
16. (Currently amended): The aqueous solution composition of Claim 15 wherein said composition treats or prevents diseases caused by *Phytophthora infestans*.

17. (Currently amended): The aqueous solution composition of Claim 1 wherein the plants are tomato and potato species.

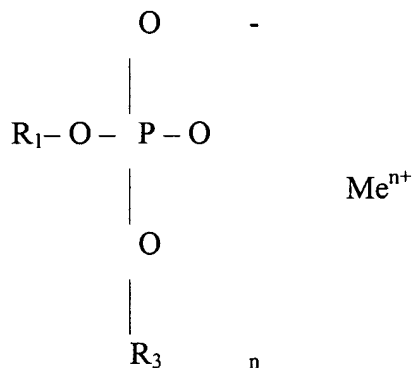
18. (Currently amended): A method for controlling fungicidal and/or bacterial disease wherein said method comprises applying to a plant an aqueous solution of fungicidally and/or bactericidally effective amounts of at least one metal chelate, at least one phosphate salt, and at least one phosphonate salt in aqueous solution, wherein said phosphonate salt is selected from a group consisting of  $(NH_3)_2 HPO_3$  and compounds having has the following formula:



said phosphate salt is selected from a group consisting of  $(NH_3)_2HP0_4$ ,  $(NH_3)_3P0_4$ ,  
and compounds having the following formula:



or the formula:



where  $R_1$  is selected from the group consisting of H, K, an alkyl radical  
containing from 1 to 4 carbon atoms, halogen-substituted alkyl or nitro-  
substituted alkyl radical, an alkenyl, halogen-substituted alkenyl, alkynyl,  
halogen-substituted alkynyl, alkoxy-substituted alkyl radical, ammonium

substituted by alkyl or hydroxy alkyl radicals;

R<sub>2</sub> and R<sub>3</sub> are selected from the group consisting of H and K;

Me is selected from the group consisting of K, alkaline earth metal cations, an aluminum atom, and an ammonium cation;

n is a whole number equal to between 1 and 3, equal to the valence of Me; and

~~said metal is a metal selected from rows 4 or 5 of the periodic table of the elements~~  
said metal chelate is a metal selected from the group consisting of iron, zinc, tin, manganese, copper and combinations thereof, and the chelate of said metal chelate is selected from the group consisting of pEDDHA, EDDHA, and EDDHMA and combinations thereof.

19. (Currently amended): The method of Claim 18 wherein the concentration of said metal chelate in said aqueous solution is such that, when said aqueous solution is applied to one acre, about 0.01 to about 2 pounds AI of said metal chelate is applied to that acre. ~~said metal chelate is present in said aqueous solution in amount equal to from about 0.01 to about 2 pounds AI per acre.~~

20. (Currently amended): The method of Claim 19 wherein the concentration of said metal chelate in said aqueous solution is such that, when said aqueous solution is applied to one acre, about 0.01 to about 0.8 pounds AI of said metal chelate is applied to that acre ~~said metal chelate is present in said aqueous solution in amount equal to from about 0.01 to about 0.8 pounds AI per acre.~~

21. (Currently amended): The aqueous solution ~~method~~ of Claim 18 wherein the ~~said~~ metal of said metal chelate is a metal selected from the group consisting of zinc, manganese and copper and combinations thereof ~~row 4 of the periodic table of the elements.~~

22. (Original): The method of Claim 18 wherein said metal chelate has a solubility equal to about 100% where at least 80 pounds of said metal chelate are dissolved in 100 gallons of water at 50° C.

23. (Original): The method of Claim 18 wherein said metal chelate is added as an aqueous solution containing an amount of metal chelate (on a metal basis) equal to between 1 % and 5% by weight of the aqueous solution.

24. (Cancelled)

25. (Cancelled)

26. (Currently amended): The method of Claim 21 ~~25~~ wherein said metal chelate is selected from the group consisting of Cu-EDDHA, Cu-pEDDHA, Cu-EDDHMA, and combinations thereof.

27. (Cancelled)

28. (Currently amended): The method of Claim 18 wherein said first salt is selected from the group consisting of  $K_2HPO_3$ ,  $KH_2PO_3$ , and  $(NH_3)H_2PO_3$ , and  $(NH_3)_2HPO_3$ ; and said second salt is selected from the group consisting of  $K_2HPO_4$ ,  $KH_2PO_4$ ,  $K_3PO_4$ ,  $(NH_3)_2HPO_4$ , and  $(NH_3)H_2PO_4$ , and  $(NH_3)_3PO_4$ .

29. (Currently amended): The method of Claim 18 ~~wherein said composition is in an aqueous solution~~, wherein each said first and second salt is present in said aqueous solution from about 0.1 millimolar to about 1000 millimolar.

30. (Currently amended): The method of Claim 29 ~~30 wherein said composition is in an aqueous solution~~, wherein each said first and second salt is present in said aqueous solution from about 20 millimolar to about 200 millimolar.

31. (Original): The method of claim 18 wherein the weight ratio of said first salt to said second salt is 1:0.001 to 1:1,000.

32. (Currently amended): The method of claim 18 wherein said aqueous solution ~~composition~~ treats or prevents diseases caused by Phytophthora.

33. (Currently amended): The method of claim 32 wherein said aqueous

solution ~~composition~~ treats or prevents diseases caused by *Phytophthora infestans*.

34. (Original): The method of claim 18 wherein the plants are tomato and potato species.

35. (Currently amended): A method of controlling fungicidal and/or bactericidal disease in plants comprising applying to the plants in enhanced fungicidally and/or bactericidally effective amounts an aqueous solution ~~composition~~ comprising:

- a. an aqueous solution of  $H_3PO_3$  and KOH,
- b. an aqueous solution of monopotassium phosphate and KOH, and
- c. a metal chelate wherein the metal of said metal chelate ~~said metal is a metal selected from rows 4 or 5 of the periodic table of the elements is a metal selected from the group consisting of iron, zinc, tin, manganese, copper and combinations thereof, and the chelate of said metal chelate is selected from the group consisting of pEDDHA, EDDHA, and EDDHMA and combinations thereof.~~

36. (Original): The method of Claim 35 wherein the amount of potassium phosphonate in said aqueous solution (a) and the amount of potassium phosphate in said aqueous solution (b) is each present in said composition in an amount from about 0.1 millimolar to about 1000 millimolar

37. (Original): The method of Claim 35 wherein the weight ratio of potassium phosphonate prepared from solution (a) in said composition to potassium phosphate prepared from solution (b) in said composition is 1:0.001 to 1:1,000.

38. (Currently amended): The method of Claim 35 wherein the concentration of said metal chelate is present in said aqueous solution in amount is such that when said aqueous solution is applied to one acre, about 0.01 to about 2 pounds AI of said metal chelate is applied to that acre. ~~the metal is applied to the plants at a rate of from about 0.01 to about 2 pounds AI per acre.~~



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39. (Currently amended): The method of Claim 35 wherein ~~said chelate~~ constituent is selected from ~~pEDDHA, EDDHA, EDDHMA or combinations thereof, and~~ said metal of said metal chelate is selected from the group consisting of iron, zinc, ~~tin~~, manganese, copper, and combinations thereof.

40. (Currently amended): A method of controlling fungicidal and/or bactericidal disease in plants comprising applying to the plants in enhanced fungicidally and/or bactericidally effective amounts an aqueous solution ~~composition~~ prepared by mixing:

- a. an aqueous solution of  $H_3PO_3$  and KOH,
- b. an aqueous solution of monopotassium phosphate and KOH, and
- c. a metal chelate wherein the metal of said metal chelate ~~said metal is a metal selected from rows 4 or 5 of the periodic table of the elements is a metal selected from the group consisting of iron, zinc, tin, manganese, copper and combinations thereof, and the chelate of said metal chelate is selected from the group consisting of pEDDHA, EDDHA, and EDDHMA and combinations thereof.~~

41. (Original): The method of Claim 40 wherein the amount of potassium phosphonate in said aqueous solution (a) and the amount of potassium phosphate in said aqueous solution (b) is each present in said composition in an amount from about 0.1 millimolar to about 1000 millimolar

42. (Original): The method of Claim 40 wherein the weight ratio of potassium phosphonate prepared from solution (a) in said composition to potassium phosphate prepared from solution (b) in said composition is 1:0.001 to 1:1,000.

43. (Currently amended): The method of Claim 40 wherein the concentration of said metal chelate ~~is present~~ in said aqueous solution ~~in amount~~ is such that when said aqueous solution is applied to one acre, about 0.01 to about 2 pounds AI of said metal chelate is applied to that acre. ~~the metal is applied to the plants at a rate of from about~~

~~0.01 to about 2 pounds AI per acre.~~

44. (Currently amended) The method of Claim 40 wherein said ~~chelate~~ constituent is selected from ~~pEDDHA, EDDHA, EDDHMA or combinations thereof, and~~ said metal of said metal chelate is selected from the group consisting of iron, zinc, ~~tin~~, manganese, copper, and combinations thereof.

45. (Currently amended): A method of controlling fungicidal and/or bactericidal disease in plants comprising applying to the plants in enhanced fungicidally and/or bactericidally effective amounts an aqueous solution composition comprising:

- a. an aqueous solution of  $H_3PO_3$  and KOH,
- b. an aqueous solution of dipotassium phosphate, and
- c. a metal chelate wherein the metal of said metal chelate ~~said metal is a metal selected from rows 4 or 5 of the periodic table of the elements is a metal selected from the group consisting of iron, zinc, tin, manganese, copper and combinations thereof, and the chelate of said metal chelate is selected from the group consisting of pEDDHA, EDDHA, and EDDHMA and combinations thereof.~~

46. (Original): The method of Claim 45 wherein the amount of potassium phosphonate in said aqueous solution (a) and the amount of potassium phosphate in said aqueous solution (b) is each present in said composition in an amount from about 0.1 millimolar to about 1000 millimolar

47. (Original): The method of Claim 45 wherein the weight ratio of potassium phosphonate prepared from solution (a) in said composition to potassium phosphate prepared from solution (b) in said composition is 1:0.001 to 1:1,000.

48. (Currently amended): The method of Claim 45 wherein the concentration of said metal chelate in said aqueous solution is such that, when said aqueous solution is applied to one acre, about 0.01 to about 2 pounds AI of said metal chelate is applied to

~~that acre. said metal chelate is present in said aqueous solution in amount such that the metal is applied to the plants at a rate of from about 0.01 to about 2 pounds AI per acre.~~

49. (Currently amended): The method of Claim 45 wherein said ~~chelate~~ constituent is selected from ~~pEDDHA, EDDHA, EDDHMA or combinations thereof, and~~ said metal of said metal chelate is selected from the group consisting of iron, zinc, ~~tin~~, manganese, copper, and combinations thereof.

50. (Currently amended): A method of controlling fungicidal and/or bactericidal disease in plants comprising applying to the plants in enhanced fungicidally and/or bactericidally effective amounts an aqueous solution ~~composition~~ prepared by mixing:

- a. an aqueous solution of  $H_3PO_3$  and KOH,
- b. an aqueous solution of dipotassium phosphate, and
- c. a metal chelate wherein the metal of said metal chelate ~~said metal is a metal selected from rows 4 or 5 of the periodic table of the elements is a metal selected from the group consisting of~~ iron, zinc, tin, manganese, copper and combinations thereof, and the chelate of said metal chelate is selected from the group consisting of pEDDHA, EDDHA, and EDDHMA and combinations thereof.

51. (Original): The method of Claim 50 wherein the amount of potassium phosphonate in said aqueous solution (a) and the amount of potassium phosphate in said aqueous solution (b) is each present in said composition in an amount from about 0.1 millimolar to about 1000 millimolar

52. (Original): The method of Claim 50 wherein the weight ratio of potassium phosphonate prepared from solution (a) in said composition to potassium phosphate prepared from solution (b) in said composition is 1:0.001 to 1:1,000.

53. (Currently amended): The method of Claim 50 wherein the concentration

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of said metal chelate is present in said aqueous solution in amount is such that when said aqueous solution is applied to one acre, about 0.01 to about 2 pounds AI of said metal chelate is applied to that acre. the metal is applied to the plants at a rate of from about 0.01 to about 2 pounds AI per acre.

54. (Currently amended): The method of Claim 50 wherein said ~~chelate~~ constituent is selected from ~~p~~EDDHA, EDDHA, EDDHMA or combinations thereof, and ~~said metal of said metal chelate~~ is selected from the group consisting of iron, zinc, tin, manganese, copper, and combinations thereof.

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